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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-----------------------------|----------------------|---------------------|------------------|
| 10/566,672 | 02/01/2006 | Masaaki Kaneko | 10517/310 | 9214 |
| 23838 KENYON & K | 7590 05/27/200 ENYON LLP | EXAMINER | | |
| 1500 K STREE | | RESTIFO, JEFFREY J | | |
| SUITE 700 WASHINGTON, DC 20005 | | | ART UNIT | PAPER NUMBER |
| | | | 3618 | |
| | | | | |
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| | | | 05/27/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|--|---|-----------------------|--|--|--|
| | 10/566,672 | KANEKO, MASAAKI | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Jeffrey J. Restifo | 3618 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>28 Ja</u> | nuary 2009 | | | | |
| <i>,</i> — · · · · · · · · · · · · · · · · · · · | action is non-final. | | | | |
| <i>;</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>19-33</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>19-33</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | |
| Application Papers | | | | | |
| | | | | | |
| 9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on <u>01 February 2006</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. | | | | | |
| | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| <u> </u> | | (1) | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) | ite | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizuno (US 2006/0102398 A1).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

3. Mizuno discloses a vehicle comprising a fuel cell 30, power storing device 40, fuel supply or hydrogen tanks (vessels) 18, load or motors 16, PCU 50, all position along the longitudinal axis, high voltage wiring 56, 57, fuel lines 19, connectors 18a, wherein both fuel lines and wiring being between first and second side members or vehicle body sides (not numbered), and on opposite side from each other, as shown in figures 1-4.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno, as applied to claim 19 above.

Mizuno does not disclose a T-shaped case for the PCU. The shape of the PCU case is not patentable unless it produces an unexpected result and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have shaped the PCU case of Mizuno like a "T" or any other shape in order to arrange the case in tight spaces and form fit with other components.

6. Claims 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al., as applied to claim 19 above, and further in view of Ono et al. (US 6,378,637 B1).

Mizuno discloses longitudinal first and second frame members 21, 22, and transverse members 24, 25, as shown in figure 3. Mizuno et al. does not disclose the fuel cell and components as being between the frames. Ono et al. does disclose fuel cell 3 as being between frame members 14, as shown in figures 2-3. It would have been obvious to one having ordinary skill in the art at the time of the invention to have

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located the fuel cell and components of Mizuno between the frames, as taught by Ono et al. in order to lower the overall height and protect from damage.

- 7. Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno (US 2006/0102398 A1).
- 8. Mizuno discloses a vehicle comprising a fuel cell 30, power storing device 40, fuel supply or hydrogen tanks (vessels) 18, load or motors 16, PCU 50, all position along the longitudinal axis, high voltage wiring 56, 57, fuel lines 19, connectors 18a, wherein both fuel lines and wiring being between first and second side members or vehicle body sides (not numbered), and on opposite side from each other, as shown in figures 1-4. Mizuno does not disclose the fuel cell as being in front of the PCU, battery and fuel supply when going from front to rear along the longitudinal axis. Simply shifting the location of the fuel cell to the front of the vehicle is not viewed as patentable unless it produces an unexpected result and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have located the fuel cell of Mizuno anywhere along the vehicle frame in order to achieve a desired balance in the vehicle weight and allow access from a desired location.

Response to Arguments

9. Applicant's arguments filed 1/28/09 have been fully considered but they are not persuasive. With respect to the applicant's arguments concerning claim 19, the side members can be interpreted as body panels and therefore Mizuno still reads on the

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claims. The side members are defined as frame members in claims 25-28 and Ono et al. has been applied to show a fuel cell between the frames.

10. With respect to the applicant's arguments concerning claim 29, Even if Mizuno suggests that locating the fuel cell at different locations may make wiring more "complicated" does not mean that it can't be done and further, the concept of having certain components closer together to reduce and simplify wiring and/or piping is not viewed as unexpected. For these reasons the rejection stands.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571) 272-6697. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey J Restifo Primary Examiner Art Unit 3618

/Jeffrey J Restifo/ Primary Examiner, Art Unit 3618